

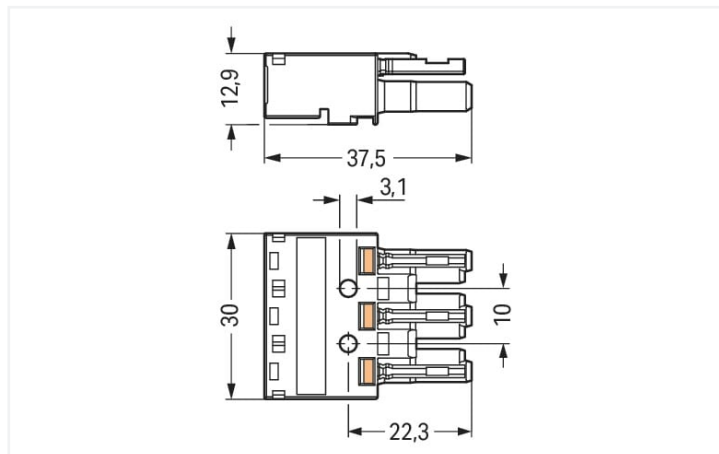
Data Sheet | Item Number: 770-1303

Socket; 3-pole; Cod. P; 4,00 mm²; red

<https://www.wago.com/770-1303>



Color: ■ red



Dimensions in mm

Female connector/socket WINSTA® MIDI 3-pole

The WINSTA® MIDI female connector/socket with protection type IP20 is the pluggable solution for your use in control cabinets, for lighting connections or on PCBs. WAGO pluggable installation connectors are used when specifications repeat or are distributed on a specific pattern, for example for installing grid lighting or flush-mount lighting. For greater protection in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismatching. The pluggable installation connector is protected against ingress by solid objects in accordance with protection type IP20 (When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). WINSTA® MIDI pluggable installation connectors with P coding allow error-free implementation of an uninterruptible power supply (UPS). This pluggable installation connector can be employed for a voltage load of up to 25 A. Thus, it can also be used for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in a broad range of individual products you can use for quick, easy, secure, tailored installation.

Lower costs through fast commissioning and elimination of service expenses – solutions from WINSTA® MIDI

The WINSTA® Pluggable Connection System is perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and consequently more efficient, more reliable, and error-free. Use of this pre-assembled system decreases assembly times and installation errors at the construction site. Choose durability and quality – with protection against mismatching from WAGO makes the installation of electrical components visibly easier.

- pluggable installation connectors with protection against mismatching
- for automation controllers
- for UPS applications
- flexible installation to save space
- convenient installation and commissioning

Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	250 V	-	-
Rated surge voltage	4 kV	-	-
Rated current	25 A	-	-

Approvals per	UL 1977
Rated voltage	600 V
Rated current	23 A

General information

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket
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Connection data

Connection points	6	Connection 1	
Total number of potentials	3	Connection technology	Push-in CAGE CLAMP®
		Actuation type	Operating tool Push-in
		Nominal cross-section	4 mm ² / 12 AWG
		Solid conductor	0.5 ... 4 mm ² / 20 ... 12 AWG
		Solid conductor; push-in termination	1.5 ... 4 mm ² / 16 ... 12 AWG
		Stranded conductor	0.5 ... 2.5 mm ² / 20 ... 14 AWG
		Fine-stranded conductor	0.5 ... 4 mm ² / 20 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 20 ... 16 AWG
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 20 ... 14 AWG
		Fine-stranded conductor; with ferrule; push-in termination	1.5 mm ² / 16 AWG
		Strip length	9 mm / 0.35 inches
		Pole number	3
		Conductor entry direction to mating direction	0°

Physical data

Pin spacing	10 mm / 0.394 inches
Width	30 mm / 1.181 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

Mechanical data

Application	EDV (UPS)
Coding	P
Variable coding	No
Marking	L N
Potential marking	L N
Mating force of a plug-in connection	approx. 20 ... 70 N (depending on pole number)
Retention force of a plug-in connection	Locked: > 80 N
Unmating force of a plug-in connection	Unlocked: approx. 20 ... 70 N (depending on pole number)
Number of mating cycles	200, without resistive load
Protection type	IP20; When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)

Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	Yes
Note on mismating protection	All WINSTA® components are 100% protected against mismating when: a.) plugging different numbers of poles b.) plugging while rotated 180 c.) plugging while laterally staggered d.) plugging one pole
Locking lever	Can be retrofitted
Locking of plug-in connection	Locking lever
Note on locking system	All connectors for mounted installations (snap-in versions for lighting fixtures or devices, all types of PCB and distribution connectors) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for flying leads (plug/socket).

Material data

Note (material data)	Information on material specifications can be found here
Color	red
Cover color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.174 MJ
Weight	9.5 g

Environmental requirements

Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C
Note on continuous operating temperature	Insulating parts for temperatures ≤ 105 °C

Commercial data

Product Group	20 (Winsta)
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454389666
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123228
CCA DEKRA Certification B.V.	IEC 61535	NL -84761
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	19-HG1868589-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001Z6
LR Lloyds Register	IEC 61984	LR22429487TA

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 770-1303

Documentation

Bid Text			
770-1303	19.02.2019	xml 3.01 KB	
770-1303	08.06.2015	doc 23.50 KB	

CAD/CAE-Data

CAD data
2D/3D Models 770-1303

CAE data
EPLAN Data Portal 770-1303
WSCAD Universe 770-1303
ZUKEN Portal 770-1303

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9973/206-101
pre-assembled connecting cable; Eca;
Plug/open-ended; 3-pole; Cod. P; H05VV-
F 3G 1.5 mm²; 1 m; 1,50 mm²; red



Item No.: 771-9973/006-101
pre-assembled interconnecting cable;
Eca; Socket/plug; 3-pole; Cod. P; H05VV-F
3G 1.5 mm²; 1 m; 1,50 mm²; red

1.1.2 Distribution box



Item No.: 899-631/331-000

Distribution box; Single-phase current (230 V); 1 input; 6 outputs; Cod. P; MIDI; black

Item No.: 899-631/330-000

Distribution box; Single-phase current (230 V); 1 input; 7 outputs; Cod. P; MIDI; black

Item No.: 899-631/311-000

Distribution box; Single-phase current (230 V); 2 inputs; 6 outputs; Cod. A, P; MIDI; black

1.1.3 Distribution connector



Item No.: 770-907

3-way distribution connector; 3-pole; Cod. P; 1 input; 3 outputs; 2 locking levers; red

Item No.: 770-934

h-distribution connector; 3-pole; Cod. P; 1 input; 2 outputs; outputs on one side; 2 locking levers; red

Item No.: 770-936

h-distribution connector; 3-pole; Cod. P; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; red

1.1.4 Male connector/plug



Item No.: 770-1313

Plug; 3-pole; Cod. P; 4,00 mm²; red

Item No.: 770-2313

Snap-in plug; 3-pole; Cod. P; 4,00 mm²; red

Item No.: 770-2313/007-000

Snap-in plug; with direct ground contact; 3-pole; Cod. P; 4,00 mm²; red

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system



Item No.: 770-101

Locking lever; for flying leads; for manual operation; black

Item No.: 770-121

Locking lever; for flying leads; for manual operation; white

Item No.: 770-111

Locking lever; for flying leads; for tool operation; black

Item No.: 770-131

Locking lever; for flying leads; for tool operation; white

1.2.2 Strain relief

1.2.2.1 Strain relief housing



Item No.: 770-503

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

Item No.: 770-513

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover



Item No.: 770-201

Lockout cap; 12-pole, separable; for sockets; Plastic; black

Item No.: 770-221

Lockout cap; 12-pole, separable; for sockets; Plastic; white

1.3.2 Installation

1.3.2.1 Mounting accessories



Item No.: 770-318

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; black



Item No.: 770-338

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; white

1.3.3 Marking

1.3.3.1 Marker



Item No.: 770-450/000-006

Marker card; Plastic; blue



Item No.: 770-450/000-001

Marker card; Plastic; green



Item No.: 770-450/000-012

Marker card; Plastic; orange



Item No.: 770-450/000-005

Marker card; Plastic; red



Item No.: 770-450

Marker card; Plastic; white



Item No.: 770-450/000-002

Marker card; Plastic; yellow

1.3.4 Strain relief

1.3.4.1 Strain relief housing



Item No.: 770-503/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; black



Item No.: 770-513/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; white



Item No.: 770-503/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; black



Item No.: 770-513/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; white



Item No.: 770-513/032-000

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white



Item No.: 770-503/035-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black



Item No.: 770-503/038-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black



Item No.: 770-513/035-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; white



Item No.: 770-513/038-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; white



Item No.: 770-503/032-000

Strain relief housing; 3-pole; with locking clip; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

1.3.5 Tool

1.3.5.1 Operating tool



Item No.: 770-383

Operating tool; 3-way; green



Item No.: 210-719

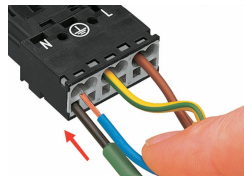
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

Conductor termination



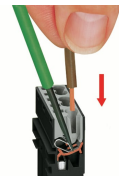
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

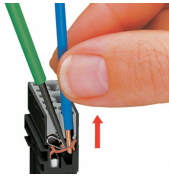


Insert the stripped solid conductor until it hits the backstop.



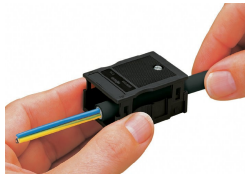
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

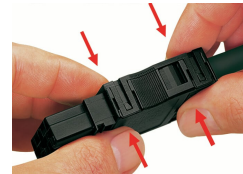
Installation



We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



Latch the strain relief housing onto the plug/socket. Note the "TOP" inscription.



Prepare strain relief housing by snapping together upper and bottom part.



Tighten strain relief screw with screwdriver (2.5 mm blade width).